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The claims have been amended to more clearly recite the distinguishing features. For

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generated group address in the address table, **whereby a plurality of addresses are represented**

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PAGE 5/13 * RCVD AT 4/19/2004 9:21:18 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/0 * DNIS:8729306 * CSID:9782649119 * DURATION (mm-ss):03-34

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place of at least one corresponding character of the plurality of addresses, thereby generating a

group address," claim 15 recites "at least one entry representative of a plurality of addresses, said

entry having at least one regular expression character in place of corresponding characters in the

plurality of addresses, said entry being generated by identifying commonality between the

plurality of addresses, selecting at least one regular expression character having a predetermined

meaning which represents the identified commonality between the addresses, inserting the

selected at least one regular expression character in place of at least one corresponding character

of the plurality of addresses, and storing the generated group address in the address table" and

claim 16 recites "a management object for storing at least one entry representative of a plurality

of addresses, said entry having at least one regular expression character in place of corresponding

characters in the plurality of addresses, said entry being generated by identifying commonality

between the plurality of addresses, selecting at least one regular expression character having a

predetermined meaning which represents the identified commonality between the addresses,

inserting the selected at least one regular expression character in place of at least one

corresponding character of the plurality of addresses, and storing the generated group address in

the address table." Support for the amended portions of the claim is in the specification at page

5, lines 22-25, page 8, lines 15-25, page 10, line 8 through page 11, line 3, in the respective

figures described by those sections, and elsewhere. Claims 9, 10 and 13 are dependent claims

which further distinguish the invention. It is therefore respectfully submitted that the §102

rejections have been overcome, and requested that claims 1, 8-10, 13, 15 and 16 be allowed.

35 USC §103 Rejections

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Claims 2 and 3 were rejected over Romanov in view of Ankney. The Examiner indicated

that Ankney teaches that the address includes an X.121 address. Applicants do not claim to have

invented X.121, but rather a novel representation of X.121 addresses in an address table. In

particular, when read in their dependent context claims 2 and 3 distinguish the cited combination

by reciting generating a single address with a regular expression character to represent multiple

X.121 addresses, and storing that single address in an address configuration table, respectively.

Further, as discussed above, the modified address differs from the Romanov modified address

because the use of regular expression characters enables multiple addresses to be represented in a

single address, resulting in reduced storage requirements.

Claim 4 was rejected over Romanov in view of Beser, and further in view of Belser. In

particular, the Examiner cites Belser for the teaching of regular expressions. Applicants do not

claim to have invented regular expressions. Wildcards, concatenation characters and operation

characters have been used with search functions in editors and other applications for some time.

However, regular expressions have not been used to generate an address in an address table such

that the generated address represents multiple addresses with some identified commonality

indicated by the regular expression. When read in context claim 4 recites that the address

represents a plurality of MAC addresses. Because the idea of representing addresses in the

manner recited in claim 1 is novel, the more specific representation of MAC addresses in the

manner recited in claim 1 is also novel.

The Examiner also rejected claims 7, 11 and 14 over Romanov in view of Beser and

Belser, and claims 6 and 12 over Romanov in view of Peacock. These claims distinguish the

cited combinations for the same reasons already stated above. In particular, each claim includes

the limitation of a single entry in an address table to represent multiple addresses by generating a

group address having a regular expression character representative of commonality between the addresses. Reconsideration and allowance are respectfully requested.

Drawings

The Examiner objected to the Drawings for failing to show the address portions recited in the claims. The relevant language has been deleted from the claims, but for the sake of clarity the feature of generating a single address from multiple addresses in the manner presently claimed is illustrated in the Drawings. For example, in figures 8 and 9 it is illustrated that the three address entries in figure 8 can be consolidated into the single address entry in figure 9 by employing the ".*" regular expression.

35 USC §112 Rejections

The Examiner also rejected claims 1, 3, 6-8, 15 and 16 under 35 USC §112. These rejections have been rendered moot in view of the amendments to the claims. Support for the amended portions of the claims in the specification has already been cited above.
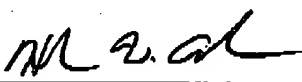
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Applicants have made a diligent effort to place the claims in condition for allowance.

However, should there remain unresolved issues that require adverse action, it is respectfully

requested that the Examiner telephone Holmes W. Anderson , Applicants' Attorney at 978-264-

6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now

considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

19 April 2004
Date

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Docket No. 2204/A14 120-052
Dd: 4/17/2004

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CLAIMS

1. (currently amended) A method for representing ~~addressing information~~ a plurality of addresses in an address table in a communication system, the method comprising the steps of:

identifying commonality between the plurality of addresses;

selecting at least one regular expression character having a predetermined meaning which represents the identified commonality between the addresses;

generating a single address that represents the plurality of addresses by inserting the selected at least one regular expression character in place of at least one corresponding character of the plurality of addresses, thereby generating a group address; and

storing the generated group address in the address table,

whereby a plurality of addresses are represented by a single group address entry in the address table. ~~apportioning at least one address into a first portion and a second portion, the first portion selected from a group consisting of: a left most portion and a right most portion;~~

~~encoding only the first portion at least one address using a regular expression;~~

~~appending the encoded first portion to the second portion to provide a modified address, and~~

~~using the modified address in place of at least one address, wherein the regular expression is selected from a group consisting of concatenation characters and operation characters.~~

2. (currently amended) The method of claim 1, wherein the ~~at least one~~ plurality of addresses comprises at least one X.121 address.

3. (currently amended) The method of claim 2, wherein said storing step includes the further step of ~~using the modified address in place of the at least one address includes~~ storing the ~~modified~~ generated group address in an address configuration table.

4. (currently amended) The method of claim 1, wherein the ~~at least one address~~ plurality of addresses comprises at least one MAC address.

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5. (cancelled)

6. (currently amended) The method of claim 3, ~~wherein~~ further comprising the step of ~~using the regular expression in place of a the first portion of the at least one address comprises~~ using the regular expression to specify at least one address of an address pool.

7. (currently amended) The method of claim 1, wherein ~~using the regular expression in place of a the first portion of the at least one address comprises~~ said storing step includes the further step of storing the ~~regular expression~~ generated group address in a management information base.

8. (currently amended) A network device operative to communicate with a plurality of other network devices, each having at least one address, comprising:
        circuitry operative to identify commonality between the addresses associated with the other network devices, select at least one regular expression character having a predetermined meaning which represents the identified commonality between the addresses, and generate a single address that represents the addresses by inserting the selected at least one regular expression character in place of at least one corresponding character of the plurality of addresses, thereby generating a group address; and
        a storage for storing the generated group address, whereby a plurality of addresses are represented by a single address entry in said storage ~~a regular expression representing a first portion of at least one address, wherein the first portion is selected from a group consisting of a right most portion of the at least one address and a left most portion of the at least one address, wherein the regular expression is selected from a group consisting of concatenation characters and operation characters.~~

9. (original) The network device of claim 8, wherein the storage comprises an address configuration table.

10. (currently amended) The network device of claim 9, wherein the regular expression character defines a source address group.

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11. (original) The network device of claim 8, wherein the storage comprises a management information base.

12. (currently amended) The network device of claim 11, wherein the regular expression character defines an address pool.

13. (original) The network device of claim 8, wherein the storage comprises a routing table.

14. (currently amended) The network device of claim 11, wherein the regular expression character defines a forwarding equivalence class for a routing table entry.

15. (currently amended) An address configuration table for mapping a plurality of source devices in a source network to a single destination device in a destination network, the address configuration table comprising:

       at least one entry representative of a plurality of addresses, said entry having at least one regular expression character in place of corresponding characters in the plurality of addresses, said entry being generated by identifying commonality between the plurality of addresses, selecting at least one regular expression character having a predetermined meaning which represents the identified commonality between the addresses, inserting the selected at least one regular expression character in place of at least one corresponding character of the plurality of addresses, and storing the generated group address in the address table.

       ~~an address configuration table entry storing an address, the address comprised of a first portion and a second portion, the first portion selected from a group consisting of the right most portion of the address and the left most portion of the address, wherein the first portion is a regular expression representing a plurality of source device addresses, and wherein the regular expression is selected from a group consisting of concatenation characters and operation characters.~~

16. (currently amended) A management information base comprising:

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   a management object for storing <u>at least one entry representative of a plurality of</u> <u>addresses, said entry having at least one regular expression character in place of corresponding</u> <u>characters in the plurality of addresses, said entry being generated by identifying commonality</u> <u>between the plurality of addresses, selecting at least one regular expression character having a</u> <u>predetermined meaning which represents the identified commonality between the addresses,</u> <u>inserting the selected at least one regular expression character in place of at least one</u> <u>corresponding character of the plurality of addresses, and storing the generated group address in</u> <u>the address table.</u>

~~a regular expression representing a first portion at least one address, wherein the first portion of the at least one address is selected from a group consisting of a left-most portion of the at least one address and a right-most portion of the at-least-one address, and wherein the regular expression is selected from a group consisting of operation characters and concatenation characters.~~